

Chicago Informative map

(8) search neighborhood

(2) filter neighborhood

overlay

(5) layer toggle

School ☐

crime ☐

target attraction ☐

start date

end date

(1) Query panel

Basic Info of region

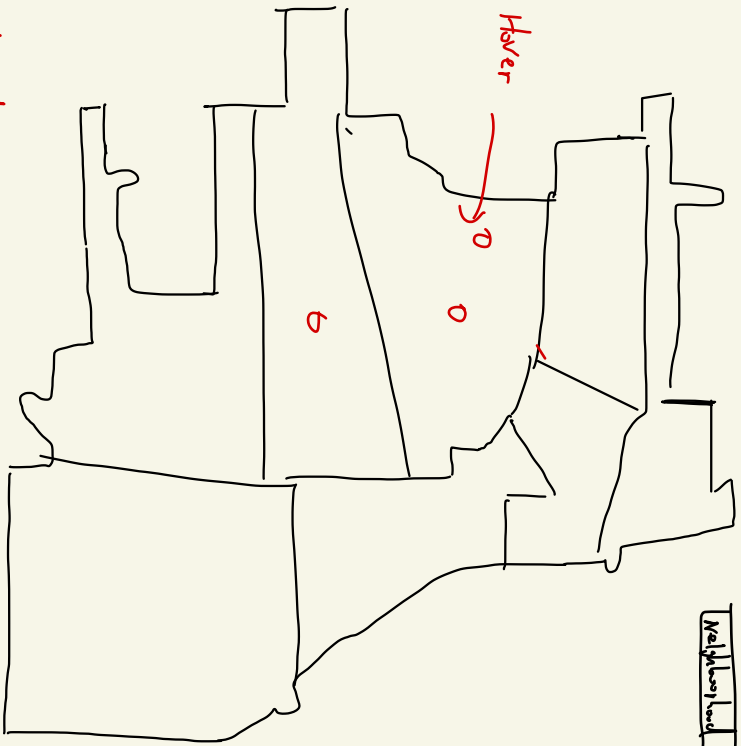
region name	
Income	
education	
safety score	

subunit

search

(6)+(7)

Hover



Neighborhood

(9) Arrange, coordinated views

Crime

region

(4) Neighborhood Ethnicity

region1

region2

order by attributes

Brush

White

Black

Asian

region1

region2

order by attributes

White

Black

Asian

Ethnicity composition

Chicago Informative map

1. User first search a region he is interested in and that region will be highlighted

Scenario 1.2

overlay

School

Crime

Travels attraction

☐
☒
☐

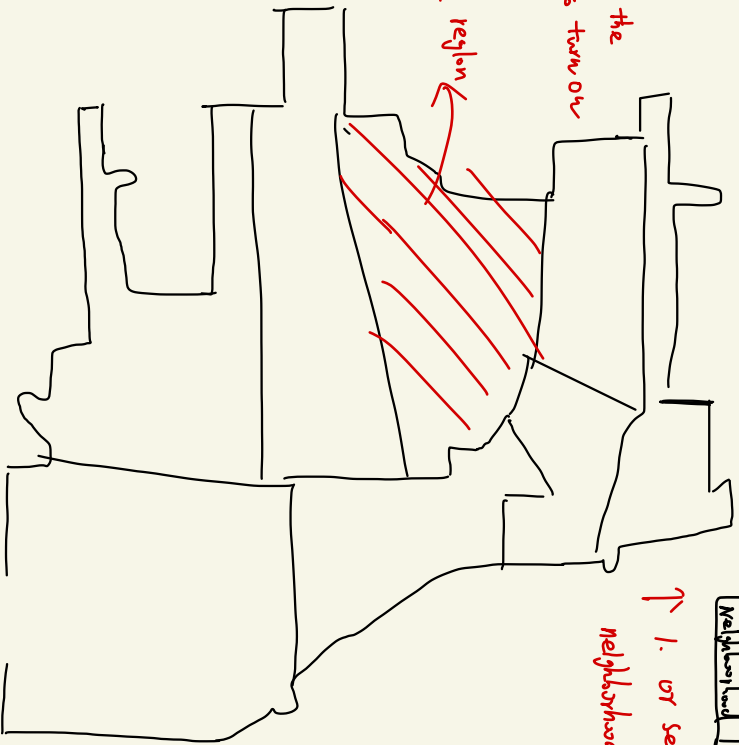
start date

end date

2

User then check the radio button to turn on multiple layer

selected region



1. or select a neighborhood from dropdown

Basic Info of region

region name	
Income	
education	
safety Score	

Sub-city

Search

Crime ☒

region ☒

region1

region2

...

regions

order by attributes

White
Black
Asian

Equality composition

Chicago Informative map

Scenario 1.3

1. User first search a region he is interested in and that region will be highlighted

overlay

School

0

Crime

0

Travels attraction

0

start date

end date

2 User then check the radio button to turn on multiple layer

selected region

Search

Neighborhood

1. or select a neighborhood from dropdown

Basic Info of region

region name	
Income	
education	
safety score	

3. Corresponding attributes of that region will be highlighted.

User can select an attribute to check the ranking of that region

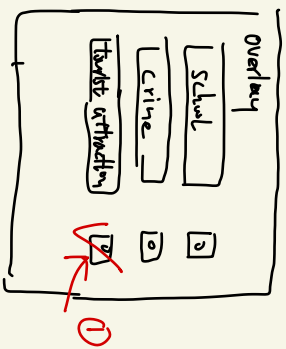
Crime

region

region1	White
region2	Black
...	Asian
region5	

order by attributes

Entropy composition



start date

1

end date

1

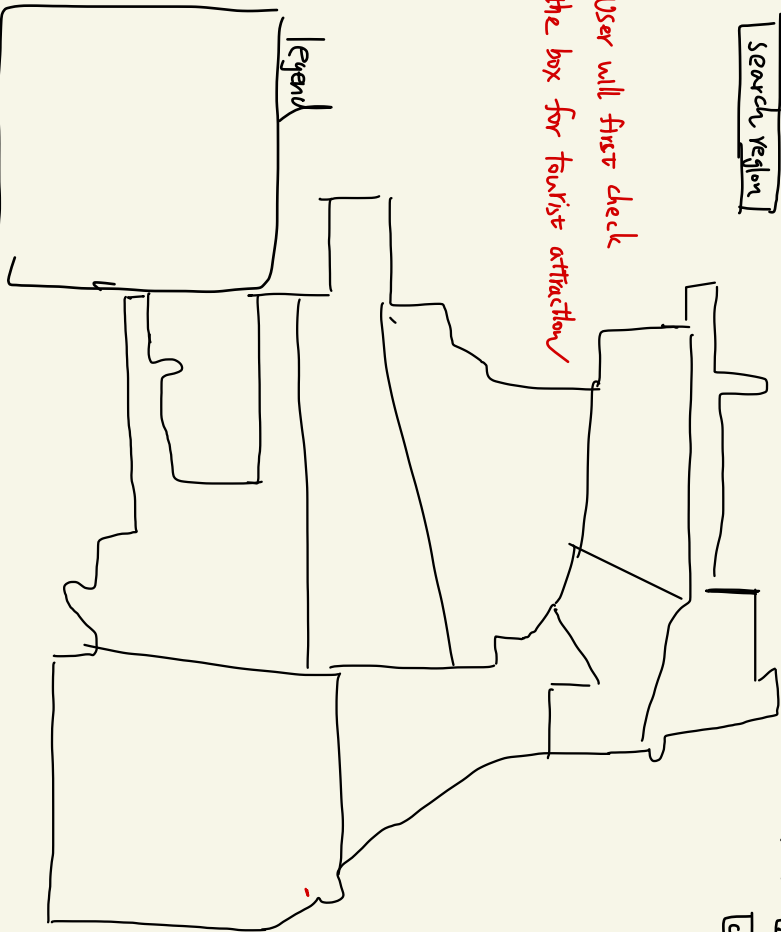
Basic Info of region

region name	
Income	
education	
safety score	

Algorithms

Search region

User will first check the box for tourist attraction



View

point	<input type="checkbox"/>
cluster	<input type="checkbox"/>

Crime ↓

region ✓

region

white

Region 2

Black

1

Aslan

regions \rightarrow

order by attributes

۲

Entity composition

overlay

School

crime

tourist attraction

☐

☐

☒

start date

end date

Basic Info of region

region name	
Income	
education	
safety score	

sub-city

Search region

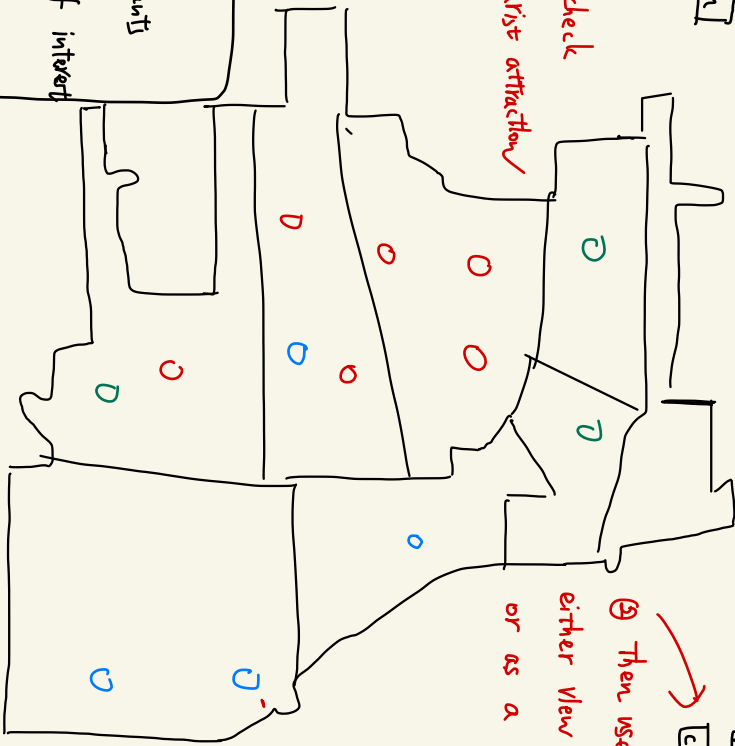
User will first check the box for tourist attraction

legend

○ restaurants

○ points of interest

○ hotels



Crime

▼

region

▼

region1

region2

...

region5

White
Black
Asian

order by attributes

Entity composition

Chicago Informative map

Scenario 2.3

overlay

☐ School

☐ crime

☒ tourist attraction

①

start date

end date

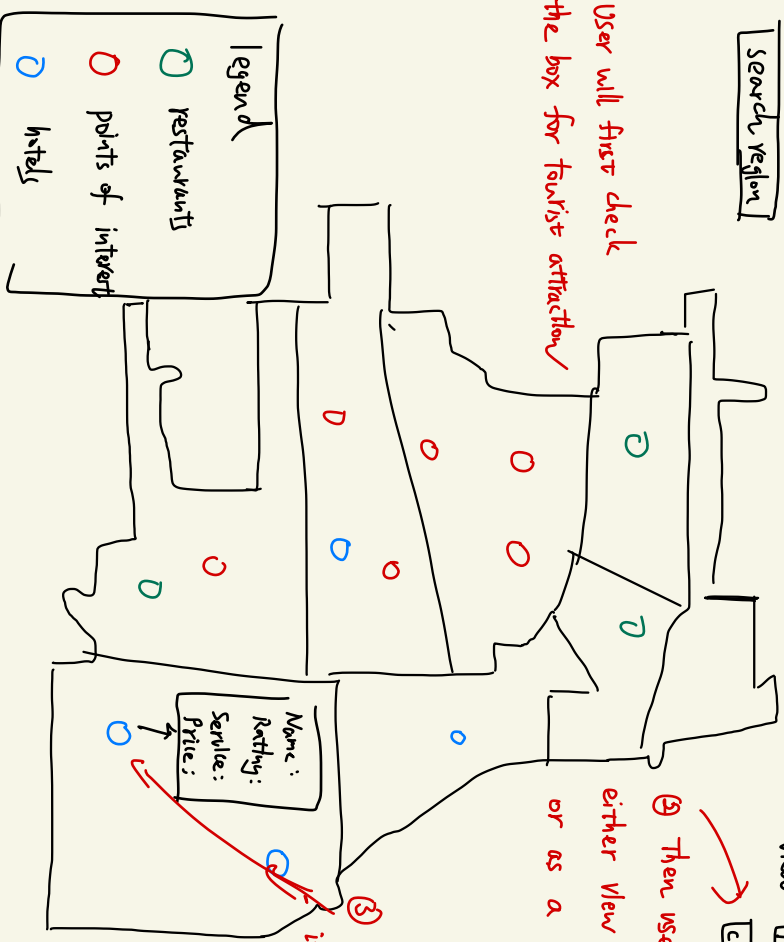
Basic Info of region

region name	
Income	
education	
safety score	

sub-city

Search region

User will first check the box for tourist attraction



View ☒ point ☐ cluster

② Then user can choose either view it as a point or as a cluster

③ User can click it to retrieve detailed info

Crime ☐

region ☐

region1

region2

...

regions

order by attributes

White

Black

Asian

region1

region2

...

regions

order by attributes

White

Black

Asian

Entity composition